Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A hybridization probe ~~that comprises a DNA capable of specifically hybridizing to a target nucleotide sequence, and an additional nucleotide sequence comprising one or more nucleotides selected from the group consisting of labeled nucleotides, labeled nucleotide derivatives, unlabeled nucleotides, and unlabeled nucleotide derivatives, wherein the additional nucleotide sequence~~ consisting of a first region having a sequence which is complementary to a target nucleotide sequence and a second region, following the first region, having a sequence comprising one or more nucleotides or nucleotide derivatives selected from the group consisting of labeled nucleotides, labeled nucleotide derivatives, unlabeled nucleotides and unlabeled nucleotide derivatives, wherein the second region has a sequence that:

a) comprises at least one nucleotide or nucleotide derivative having weaker affinity of hydrogen bonding in base pairing with bases of the target nucleotide sequence when compared with that of hydrogen bonding in an a/t pair, in an a/u pair, ~~and~~ or in a g/c pair;

b) comprises either or both of at least one labeled nucleotide and labeled nucleotide derivatives; and

c) ~~is introduced into the DNA to be labeled through nucleotide adding reaction with terminal transferase~~ is incapable of hybridizing under stringent conditions to any nucleotide sequence of the target nucleotide sequence.

2. (Canceled)

3. (Currently Amended) The hybridization probe of claim ~~2~~ 1, wherein ~~the additional nucleotide sequence comprises~~ the second region has a sequence comprising labeled nucleotides or nucleotide derivatives and unlabeled inosinic acids or derivatives thereof.

4. (Original) The hybridization probe of claim 3, wherein the labeled nucleotides or nucleotide derivatives are labeled inosinic acids or inosinic acid derivatives.

5. - 10. (Canceled)

11. (Currently Amended) A kit for synthesizing a hybridization probe, the kit comprising terminal transferase and:

~~i) nucleotides and/or nucleotide derivatives~~

~~(a) having weaker affinity of hydrogen bonding in base pairing when compared with those of hydrogen bonding in an a/t pair, in an a/u pair, and in a g/c pair; and~~

~~(b) being introduced into a DNA comprising a nucleotide sequence complementary to the target nucleotide sequence through nucleotide adding reaction with terminal transferase;~~

~~ii) labeled nucleotides or nucleotide derivatives; and~~

~~iii) terminal transferase~~

i) unlabeled nucleotides and/or unlabeled nucleotide derivatives

ii) labeled nucleotides and/or labeled nucleotide derivatives

wherein at least one nucleotide or nucleotide derivative has weaker affinity of hydrogen bonding in base pairing when compared with those of hydrogen bonding in an a/t pair, in an a/u pair, or in a g/c pair.

12. (Canceled)

13. (Currently Amended) A hybridization probe ~~that comprises a DNA capable of specifically hybridizing to a target nucleotide sequence, and an additional nucleotide sequence comprising one or more nucleotides selected from the group consisting of labeled nucleotides, labeled nucleotide derivatives, and unlabeled nucleotide derivatives, wherein the additional nucleotide sequence~~ comprising a first region having a sequence complementary to a target nucleotide sequence and a second region having a sequence comprising one or more nucleotides or nucleotides derivatives selected from the group consisting of labeled nucleotides, labeled nucleotide derivatives, and unlabeled nucleotide derivatives, wherein the second region has a sequence that:

a) comprises at least one nucleotide or nucleotide derivative having weaker affinity of hydrogen bonding in base pairing with bases of the target nucleotide sequence when compared with that of hydrogen bonding in an a/t pair, in an a/u pair, ~~and~~ or in a g/c pair;

b) comprises either or both of at least one labeled nucleotide and labeled nucleotide derivatives; and

c) ~~is introduced into the DNA to be labeled through nucleotide-adding reaction with terminal transferase which~~ is incapable of hybridizing under stringent conditions to any nucleotide sequence of the target nucleotide sequence.

14. (Currently Amended) A kit for synthesizing a hybridization probe, the kit comprising terminal transferase and the following nucleotides and/or nucleotide derivatives:

~~i) nucleotide derivatives~~

~~(a) having weaker affinity of hydrogen bonding in base pairing when compared with those of hydrogen bonding in an a/t pair, in an a/u pair, and in a g/c pair; and~~

~~(b) being introduced into a DNA comprising a nucleotide sequence complementary to the target nucleotide sequence through nucleotide-adding reaction with terminal transferase;~~

~~ii) labeled nucleotides or nucleotide derivatives; and~~

~~iii) terminal transferase~~

i) unlabeled nucleotide derivatives

ii) labeled nucleotides and/or labeled nucleotide derivatives

wherein at least one nucleotide or nucleotide derivative has hydrogen bonding base pairing affinity that is weaker than that of an a/t pair, an a/u pair, or a g/c pair.